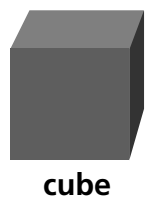
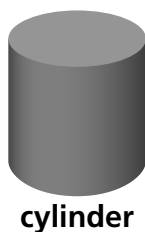
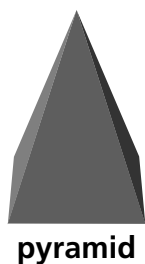


## Teaching Unit F (continued)

### Math Background

**Solid Figures** In the previous grade, students named and described cubes, rectangular prisms, cylinders, cones, pyramids, and spheres. They traced their faces and counted edges, vertices, and faces and observed if they stack, roll, or slide to help identify, sort, and classify these solid figures. In this grade, students further develop their conceptual understanding of solid figures by building them from nets. They name prisms from the shapes of their bases and identify if solid figures have parallel bases (stack), if they have flat surfaces (slide), or curved surfaces (roll). Using the attributes of solid figures they have observed, they compare solid figures and sort them according to their own sorting rules. In the last lesson of the unit, students explore the relationship between circles and spheres.



**Spatial Sense** In Unit F, students will develop their spatial sense through observations of the relationships between two-dimensional faces, views, and nets and three-dimensional objects. They observe the faces of three-dimensional solids, identifying their two-dimensional shapes and counting them, and they build three-dimensional solids from nets. After building solids from nets, they apply their spatial sense to predict if a net will form a cube, and to identify the solid a net will form before they try building it. In Lesson 4, students design a package for a product from a net. They use spatial reasoning to add text in the correct orientation to the net before folding it.

In the previous grade, students built rectangular prisms from cubes and drew them from the front, side, and top views. In this unit, students make three-dimensional buildings from cubes and draw them from front, back, right, left, and top views. They also create three-dimensional buildings from two-dimensional drawings. Throughout the unit, students sketch different viewpoints of each of the solid figures they explore. These activities continue to build students' spatial sense.

